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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,459	03/12/2004	Anthony J. Hadala	1286 Hadala	7698

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EXAMINER
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FRANK, RODNEY T

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

AKC

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,459	<b>Applicant(s)</b> HADALA, ANTHONY J.	
	<b>Examiner</b> Rodney T. Frank	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claims 18-20 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the temperature measuring device in the form of an elongated strip does not need to be used with either a method of liquid level measurement or a liquid dispensing device, as this device alone has a separate utility as a temperature measuring device such as a thermometer, and such a device is not explicitly needed for liquid level measurement or liquid dispensing.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-20 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-12, and 15-17 are rejected under 35 U.S.C. 103(a) as being obvious over Hadala (U.S. Patent Number 6,925,872), and further in view of Hof et al. (U.S. Patent Number 4,362,645; hereinafter referred to as Hof).

The Hadala reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Hadala discloses that the present invention deals with determining the level of fluid in a container. Typically, a beverage container containing a liquid will absorb heat energy from the surrounding environment at a greater rate than a gaseous component in the headspace of the beverage container. Thus, as the liquid is drawn from a beverage container a greater headspace results. If a thermometric measuring device is employed along the height of the beverage container the volume may be determined by observing the difference in the temperature along the height of the beverage container. In practice, a beer keg may exhibit a difference of as much as 9 degrees Fahrenheit on

the exterior surface of the beer keg when measured at the headspace as opposed to the area where the liquid is present in the beverage container (please see the abstract).

In reference to claim, Hadala discloses all the limitations of the present claim 1 in as shown in claim 1 of the reference, except for the limitation of amended claim 1 whereby the temperature measuring device operates at a single discrete temperature. However, Hof discloses a temperature indicating composition of matter that change color sharply upon transition from one state to another that can measure within a single discrete temperature. The motivation to combine the teaching of the references is actually found in the Hadala reference as Hadala discloses the Hof reference as a type of temperature indicating composition that would be considered within the spirit of the invention.

In reference to claims 2-4, and 10-11 since the device is Hadala is a beer keg, the claim limitations would implicitly be met. Specifically, claims 2 and 3 of the present application is addressed in view of claim 2 of the Hadala reference.

In reference to claim 6, claim 3 of Hadala addresses the adherence of the temperature measuring device.

In reference to claim 7, column 5 lines 23 through 46 address the placement of the temperature measuring devices along the keg.

In reference to claim 8, though the specific compositions may not be explicitly disclosed, the compositions are for a thermochromatic material, and the compositions are given as examples of suitable thermochromatic materials and not an inclusive list as the only choices, and thus the various compositions disclosed in Hof in column 9, would


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be functional equivalents for the compositions of the claim as they would operate as thermochromatic temperature sensing devices in a specific temperature range.

In reference to claim 9 Hadala discloses in claim 5 that the container is in a refrigerator.

In reference to claim 12, these limitations are disclosed in Hadala in claim 6.

In reference to claim 15, the fluid dispensing assembly described in the claim is disclosed by Hadala specifically, Hadala discloses the use of a keg as the container, which would meet the limitations placed on the sealed container of the present claim. Further, the method described in claim 1 of the Hadala reference discloses the use of a container that meets the claim limitations of claim 1.

In reference to claim 16, In reference to claims 2-4, and 10-11 since the device ~~is~~  Hadala is a beer keg, the claim limitations would implicitly be met since a beer keg has a means of supplying carbon dioxide.

In reference to claim 17, though the specific compositions may not be explicitly disclosed, the compositions are for a thermochromatic material, and the compositions are given as examples of suitable thermochromatic materials and not an inclusive list as the only choices, and thus the various compositions disclosed in Hof in column 9, would be functional equivalents for the compositions of the claim as they would operate as thermochromatic temperature sensing devices in a specific temperature range.

In reference to claim 18, Hof discloses a temperature indicating composition of matter that change color sharply upon transition from one state to another that can

measure within a single discrete temperature. This is illustrated by Hof, for example, in figures 6, 15, and 16.

In reference to claims 19 and 20, column 9 lines 10 through 27 of Hadala disclose the specified temperature ranges for the temperature measuring device.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hadala (U.S. Patent Number 6,925,872), and further in view of Hof et al. (U.S. Patent Number 4,362,645; hereinafter referred to as Hof) as applied to claims 1-4, 6-12, and 15-17 above, and further in view of Brown et al. (U.S. Patent Number 6,260,414; hereinafter referred to as Brown). Brown discloses a cholesteric liquid crystal fluid level indicator that determines the level of a cooled liquid, such as beer, in a closed, opaque keg when placed in thermal contact with the exterior surface of the keg, by producing a color change that is a function of the liquid temperature when the liquid is within a predetermined temperature range, the indicator comprises a multiple level strip having a top transparent layer, liquid crystal layer, a black background layer and an attachment layer employing a protected adhesive on its bottom surface for removably attaching the strip to the keg, the instant invention employs a heat conducting adhesive on the attachment layer and for securing certain layers in the strip, such as the liquid crystal layer (Please see the abstract).

The motivation to combine the teachings of Brown with the other two references is that Brown and Hadala are both specifically concerned with measuring fluid level within a beer keg, and are thus in the same field of endeavor. Also, all three references use thermochromatic material to measure quantities of materials.

5. In reference to claim 13, Brown discloses in column 6 lines 20 through 37 the color transition of the temperature measuring strip, which changes from black to green.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-4, 6-13, and 15-17 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney T. Frank whose telephone number is (571) 272-2193. The examiner can normally be reached on M-F 9-5:30 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RTF  
January 23, 2006

  
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